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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,597	08/23/2003	Edwin Joseph Selker	D-15	9798
21253	7590	06/15/2005	EXAMINER	
CHARLES G. CALL			FUREMAN, JARED	
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2876

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,597

Applicant(s)

SELKER, EDWIN JOSEPH

Examiner

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

It is acknowledged that this application is a CIP of application number 10/334,572, now U.S. Patent Number 6,863,220. The parent application has been reviewed.

Specification

1. The abstract of the disclosure is objected to because the abstract is greater than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 1, 3, 11, 12, 15, 17 and 26 are objected to because of the following informalities:

Claim 1:

Line 7, "the" should be deleted, in order to avoid a lack of proper antecedent basis for "the selective manipulation".

Line 8, "the" should be deleted, in order to avoid a lack of proper antecedent basis for "the transfer".

Claim 3, line 2: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the position".

Claim 11, line 2: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the location".

Claim 12, line 3: "the" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "the surface".

Claim 15, line 2: "the" (first occurrence) should be deleted, in order to avoid a lack of proper antecedent basis for "the selective positioning".

Claim 17, line 1: "the" should be deleted, in order to avoid a lack of proper antecedent basis for "the surface".

Claim 26:

Line 4, "the" should be deleted, in order to avoid a lack of proper antecedent basis for "the position of a conductive object".

Line 5, "the" should be deleted, in order to avoid a lack of proper antecedent basis for "the position of said one or more antenna segments".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-24 and 26-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Giesler (US 6,424,029 B1).

Giesler teaches:

Re claim 1. A radio operated data card (a chip card, see figures 1 and 3-5) including, on said card,

an antenna (antenna coil 2, see column 3, lines 55-59),

a data memory (not shown, but necessarily present in order for the data-processing circuit 1 to transmit data, see column 3, lines 50-57),

a transceiver (the data-processing circuit 1 functions as a transceiver for receiving and transmitting data signals via the antenna coil 2, see column 3, lines 50-57) for transferring data between said memory and a remote host system (a reader, see column 6, lines 48-51) via said antenna,

a user-activated electrical switching circuit (capacitive switching elements including conductor structures 10, 11, see column 3, line 66 - column 4, line 35) for generating a plurality of control signals in response to the selective manipulation of said card by a human cardholder, and

means (evaluation circuit 9, in combination with data-processing circuit 1) for controlling the transfer of data via said transceiver in response to said control signals (see column 5, lines 17-27, and column 6, lines 48-51).

Re claim 2. A radio operated data card as set forth in claim 1 wherein said control signals indicate the timing of the selective manipulation of said card (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 3. A radio operated data card as set forth in claim 1 wherein said control signals indicate the position on said card at which said selective manipulation occurs (the use of menu-controls also suggests that the control signals indicate the position on said card at which the user's touch occurs, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 4. A radio operated data card as set forth in claim 3 wherein said control signals indicate the location at which said human cardholder touches said card (the location of the touch zones 12 and 13, for example, see column 3, line 66 - column 4, line 23).

Re claim 5. A radio operated data card as set forth in claim 4 wherein said control signals further indicate the timing when said human cardholder touches said card (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 6. A radio operated data card as said forth in claim 1 wherein said electrical switching circuit comprises a plurality of switching elements (conductor structures 10 and 11 include conductor configurations 14, 15 and 16, 17, respectively, see column 4, lines 2-6) positioned at different locations on said card (see figures 1 and 3-5) and wherein said control signals indicate which of said switching elements is activated by said selective manipulation by said human cardholder (see column 4, lines 24-64).

Re claim 7. A radio operated data card as set forth in claim 6 wherein said control signals further indicate the timing when said switching elements are activated (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 8. A radio operated data card as set forth in claim 1 wherein said means for controlling the transfer of data comprises means for enabling said transceiver only when said plurality of control signals satisfies one or more predetermined conditions (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

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Re claim 9. An RFID card (a chip card, see figures 1 and 3-5) adapted to be carried by and activated by a human cardholder comprising, in combination,

a transceiver (the data-processing circuit 1 functions as a transceiver for receiving and transmitting data signals via the antenna coil 2, see column 3, lines 50-57) on said card for exchanging data between said RFID card and a remotely located card reader (a reader, see column 6, lines 48-51) electromagnetically coupled to said card,

at least one sensor (evaluation circuit 9, in combination with data-processing circuit 1, see column 3, line 50 - column 4, line 35) on said card operable by said cardholder to generate a plurality of control signals indicating a corresponding sequence of touch events when said card is being manipulated by said cardholder (the use of menu-controls suggests that the control signals indicate the sequence of touches, see column 3, lines 8-16 and column 5, lines 17-27), and

means (the data-processing circuit 1, see column 3, line 50 - column 4, line 35) responsive to said control signals for controlling the data exchanged between said RFID card and said card reader.

Re claim 10. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 9 wherein said control signals indicate the timing of said touch events (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 11. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 9 wherein said control signals indicate the location on said card where said touch events occur (the location of the touch zones 12 and 13, for example, see column 3, line 66 - column 4, line 23).

Re claim 12. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 11 wherein said sensor comprises a plurality of switching elements (conductor structures 10 and 11 include conductor configurations 14, 15 and 16, 17, respectively, see column 4, lines 2-6) located at different positions on the surface of said card (see figures 1 and 3-5).

Re claim 13. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 12 wherein said transceiver is electromagnetically coupled to said card reader by an antenna and wherein each of said plurality of switching elements are connected to said antenna to vary the gain or resonant frequency of said antenna (the change in capacitance will vary, at least to some extent, the gain or resonant frequency of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 14. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 12 wherein said switching elements are activated at

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different times by said cardholder to generate said plurality of control signals (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 15. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 11 wherein said switching elements are activated by the selective positioning of the cardholder's hand with respect to said card (see column 3, lines 8-16, and column 5, lines 18-27).

Re claim 16. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 9 wherein said transceiver is enabled only when said plurality of control signals satisfies a predetermined criteria (the use of menu-controls suggests that the control signals indicate the timing of the user's touch, the sequence of touches for example, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 17. A data card (a chip card, see figures 1 and 3-5) carried by a cardholder including a plurality of sensors (capacitive switching elements including conductor structures 10, 11, function as sensors, see column 3, line 66 - column 4, line 35) positioned on the surface of said card (see figures 1 and 3-5) forming a data entry keypad operable by said cardholder.

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Re claim 18. A data card carried by a cardholder as set forth in claim 17 wherein said sensors are connected to an integrated circuit (data-processing circuit 1, see column 3, lines 50-57) on said card to control the operation of said integrated circuit.

Re claim 19. A data card carried by a cardholder as set forth in claim 18 wherein said data card further includes an antenna (antenna coil 2, see column 3, line 57) for electromagnetically communicating data between said card and a remote reader (a reader, see column 6, lines 48-51).

Re claim 20. A data card carried by a cardholder as set forth in claim 18 wherein said data card further includes a communications circuit (the combination of data-processing circuit 1 and antenna coil 2, see column 3, lines 50-57) for exchanging information between said data card and a remote reader (a reader, see column 6, lines 48-51), and wherein said at least some of said information is entered by said cardholder using said data entry keypad (the use of menu-controls suggests entry of information, see column 3, lines 8-16 and column 5, lines 17-27).

Re claim 21. An RFID card (a chip card, see figures 1 and 3-5) adapted to be carried by and activated by a human cardholder comprising an on-card antenna (antenna coil 2, see column 3, line 57) having a preferential response to the presence of a conductive object (the user's finger or thumb, for example, see column 3, lines 8-16) positioned proximate to a predetermined region (touch zones 12 and 13, for example, see column

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4, lines 2-4) of said card and sensing means (the combination of conductor configurations 14, 15 and 16, 17 and evaluation circuit 9, see column 3, line 66 - column 4, line 35) coupled to said antenna for detecting the presence of said object.

Re claim 22. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said sensing means detects a change in the Q of said antenna in the presence of said object (the change in capacitance will vary, at least to some extent, the Q of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 23. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said sensing means detects a change in the amplitude gain of said antenna in the presence of said object (see column 4, line 65 - column 5, line 4).

Re claim 24. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said conductive object is a human hand (see column 3, lines 8-16).

Re claim 26. An RFID card (a chip card, see figures 1 and 3-5) adapted to be carried by and activated by a human cardholder comprising

one or more antenna segments (antenna coil 2, see column 3, line 57) on said card and

a sensor (the combination of conductor configurations 14, 15 and 16, 17 and evaluation circuit 9, see column 3, line 66 - column 4, line 35) coupled to said two or more antenna segments for detecting the position of a conductive object (the user's finger or thumb, for example, see column 3, lines 8-16) relative to the position of said one or more antenna segments.

Re claim 27. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 26 wherein said sensor detects a change in the Q of said antenna in the presence of said object (the change in capacitance will vary, at least to some extent, the Q of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 28. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 26 wherein said sensor detects a change in the standing wave ratio exhibited by said two or more antenna segments in the presence of said object (the change in capacitance will vary, at least to some extent, the standing wave ratio of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

Re claim 29. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 26 wherein said sensor detects a change in the

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amplitude gain of said one or more antenna segments in the presence of said object (see column 4, line 65 - column 5, line 4).

Re claim 30. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 26 wherein said sensor detects a change in the resonant frequency of said one or more antenna segments in the presence of said object (the change in capacitance will vary, at least to some extent, the resonant frequency of the antenna, see figures 1, 3-5, column 3, line 50 - column 4, line 64).

5. Claims 21, 25, 26 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka (US 6,830,193 B2).

Tanaka teaches:

Re claim 21. An RFID card (IC card 3, see figures 10A and 10B) adapted to be carried by and activated by a human cardholder comprising an on-card antenna (loop antenna 5, see column 7, line 42) having a preferential response to the presence of a conductive object (crossover switch 12 including movable conductor 5", see figures 10A, 10B and column 7, lines 37-64) positioned proximate to a predetermined region of said card (see figures 10A and 10B) and sensing means (IC chip 4) coupled to said antenna for detecting the presence of said object (the IC chip 4 will detect the presence of the object in the on state, figure 10A, by transmission/reception of data).

Re claim 25. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 21 wherein said conductive object is a conductive member (movable conductor 5") mounted on said card for movement with respect to said on-card antenna to alter the characteristics of said antenna (the movable conductor 5" either completes the loop antenna 5 or opens the loop antenna 5, see figures 10A, 10B and column 7, lines 37-64).

Re claim 26. An RFID card (IC card 3, see figures 10A and 10B) adapted to be carried by and activated by a human cardholder comprising

one or more antenna segments (loop antenna 5, see column 7, line 42) on said card and a sensor (IC chip 4) coupled to said two or more antenna segments for detecting the position of a conductive object (crossover switch 12 including movable conductor 5", see figures 10A, 10B and column 7, lines 37-64) relative to the position of said one or more antenna segments (the IC chip 4 will detect the presence of the object in the on state, figure 10A, by transmission/reception of data).

Re claim 31. An RFID card adapted to be carried by and activated by a human cardholder as set forth in claim 26 wherein said conductive object is a conductive member (movable conductor 5") mounted on said card for movement with respect to said one or more antenna segments to alter the characteristics of one or more of said antenna segments (the movable conductor 5" either completes the loop antenna 5 or opens the loop antenna 5, see figures 10A, 10B and column 7, lines 37-64).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pitroda (US 5,884,271), Buescher et al (US 6,588,660), Umeno et al (JP 7-249109 A) and Horii (JP 11-212923 A) all teach data cards having the ability to sense or detect a user's touch.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (571) 272-2391. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jared J. Fureman
Examiner
Art Unit 2876

June 12, 2005